

BROOKHAVEN NATIONAL LABORATORY PHYSICS DEPARTMENT	Number: PO-ESH-01	Revision: 2.1
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Subject: ES&H Audits		
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ES&H AUDITS

I. SCOPE

The Physics Department performs a number of audits each year some of which are required by Laboratory Policy others by Department Policy. This procedure is intended to clarify the timing, scope, and reporting process for each audit. One goal of this policy is to roll up all audits into the annual self-assessment. To accomplish this, audit schedules will be shifted to a time closer to the self-assessment due date.

II. ENVIRONMENTAL MANAGEMENT SYSTEM ASSESSMENTS

A. Compliance Assessment

The Department EMS Representative (DER) and the Environmental Compliance Representative (ECR) shall serve as members of the inspection team and represent the Environmental Assessment Committee (EAC) whenever such information is gathered. Information relevant to regulatory compliance should be entered on Guidance Cards for significant aspects, or an equivalent form. The goal is to complete assessments of two SBMS Subject Areas during the fiscal year.

The DER shall update the list of satellite accumulation areas and check for compliance by visiting each area. The ECR may act in a supporting role, if necessary. The goal is to complete this activity annually.

During the Management Review the results of the Compliance Assessment shall be reported to the Department Chair. Finding significant problems may require convening an additional Management Review. If such a review is deemed necessary, it should be held as soon as possible after the problem has been identified.

Records of the Compliance Assessment shall be maintained with other self-assessment records.

B. System Assessment

Evaluate Documents. The EMS document evaluation shall take place in the December – January time frame. This coincides with the annual Experiment Safety Review "cycle" when procedures and forms are examined, evaluated and modified if necessary. The DER and the Department ES&H Committee shall include an evaluation of [EMS](#)

Documentation as part of this assessment. The ECR has a supporting role. The Department ES&H Committee and Department Chair must approve any changes.

Evaluate Operations. Tier I inspections can function as an opportunity to observe operations and to interview workers. The DER and ECR shall be part of the Tier I team during these evaluations. Information pertaining to observations shall be recorded on the appropriate assessment checklist, such as that provided in the SBMS Subject Area. The goal is to complete a minimum of two evaluations by the end of the fiscal year.

System Audit. A formal audit of all the elements of the EMS shall be performed at least every three years. A qualified auditor or an audit team led by a qualified auditor who is external to the Physics Department shall perform the audit.

During the Management Review the results of the System Assessment shall be reported to the Department Chair. Finding significant problems may require convening an additional Management Review. If such a review is deemed necessary, it should be held as soon as possible after the problem has been identified.

Records of the System Assessment shall be maintained with other self-assessment records.

C. Management Review

The results of the Compliance and System Assessments are used by the DER as input to the Management Review. A meeting is scheduled with personnel and agenda as specified in the SBMS Subject Area. Recommendations and corrective actions that are identified as a result of this review are tracked to completion. The goal is to have the meeting during the fourth quarter of the fiscal year.

The Management Review may also be held at the Directorate level, at the request of the Directorate Associate Laboratory Director. Additional Management Reviews may be scheduled as necessary as a result of findings of the Compliance and System Assessments. Such meetings may be called at the discretion of the Laboratory Management, Directorate Management, Department Management, or Assessment Team(s).

Records of the Management Review, including minutes of the meeting shall be maintained with other self-assessment records. Issues identified that require tracking shall be tracked through the BNL ATS.

III. SAFETY ASSESSMENTS

A. Tier I Program

The Tier I Program, under the direction of the ES&H Coordinator, achieves the Laboratory's departmental laboratory and office safety inspection requirements and

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serves to ensure individual Physics Laboratories' and Offices' comply with Physics Department rules and regulations, adherence to the posted authorized use of an individual lab or office, field observation of the conformity to the safe operating envelopes as granted by the Experimental Safety Review, and a building infrastructure assessment. These inspections also serve as an information gathering mechanism for performing the assessments required for the Department's EMS. The program involves Level 1, 2, and 3 managers, other departments, the DOE Facility Representative, the Environmental Compliance Representative, Group Safety Coordinators, and other members of the department.

B. Experimental Safety Review Program

The Department plans and monitors most of its activities under the [Work Planning and Control for Experiments and Operations Subject Area](#). The Department's ES&H Committee acts as the Experimental Safety Review Committee, which evaluates the activities for safety, environmental aspects, proper use of the facility, and a review of the training requirements of the individuals involved in the projects. Projects that involve the use of radioactive materials receive an informal ALARA review by the Committee. The review requires a waste minimization plan and the Committee looks for pollution prevention opportunities while reviewing individual experiments and systematically while comparing similar experiments. The review is comprehensive since it involves feedback from those working on the project and involves a visual inspection of the laboratory area by Committee members.

C. Item Specific Audits

1. **Chemical Audit** - Annual, by all Department Chemical Owners and the ES&H Coordinator, results reported in ES&H Committee Minutes.
2. **Dose Reviews** - Semi-annual, by the ES&H Committee, results reported in ES&H Committee Minutes.
3. **Department ES&H Policy Audits** - Annual, by the ES&H Committee, results reported in ES&H Committee Minutes.
4. **Sealed Source Audits** - Semi-annual for non-exempt sources, by the ES&H Coordinator, results reported in ES&H Committee Minutes.
5. **Hazard Placard Audit** - Annual, by the ES&H Coordinator, results reported in ES&H Committee Minutes.

IV. SELF ASSESSMENT

The Physics Department's Self-Assessment Plan (SAP) is based on the Laboratory's Critical Outcomes. The Department assesses the elements that are relevant to its internal strategic plans, operations, and objectives, with the goal of enhancing the performance of the Physics Department and contributing to the Critical Outcomes of the Laboratory. The SAP references elements of the Baldrige Award Criteria for self-assessment as outlined in the Integrated Assessment Program, IAP. As the primary mission of the Department is to facilitate the basic research and development activities of its scientific staff and the

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excellence of its research programs, the SAP emphasizes those areas critical to enhancing this mission. Essentially, the process entails (a) the collection of data on the Department's performance measures; (b) the analysis of these data against the Department's objectives; and (c) the implementation of appropriate corrective actions based upon the analysis.

The Department intends to integrate all of the above-required audits into the Self-Assessment Plan to present a comprehensive picture of the Department's overall performance.

V. CORRECTIVE ACTIONS AND TRACKING

The Department's Corrective Actions are tracked in a combination of the BNL ATS database and a local database for local issues such as the Tier I corrective actions under the control of the ES&H Coordinator.

Official copies of these procedures are maintained at this website. Before using a printed copy, verify that it is the most current version by checking the document issue date on this website. Signed copies of these official procedures are maintained at the Training Office.

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